Claims

[c1]   What is claimed is:

1. A method of diagnosing cardiac syndromes, the method comprising the acts of:

acquiring data from a first diagnostic test;

processing the data from the first diagnostic test to produce an indicator;

acquiring data from a second diagnostic test;

processing the data from the second diagnostic test to produce a second indicator;

combining the indicators; and

calculating a risk of a cardiac syndrome based on the combination of indicators.

[c2]   2. A method as set forth in claim 1, further comprising the acts of acquiring data from a third diagnostic test and processing the data from the third diagnostic test to produce a third indicator.

[c3]   3. A method as set forth in claim 1, wherein the act of combining the indicators includes a Mamdani inference method.

[c4]   4. A method as set forth in claim 1, wherein the act of calculating a risk of a cardiac syndrome includes a Mamdani inference method.

[c5]   5. A method as set forth in claim 1, wherein the act of acquiring data from a first diagnostic test includes acquiring diagnostic data of a first type.

[c6]   6. A method as set forth in claim 5, wherein the act of acquiring data from a first diagnostic test is performed by an ECG acquisition module.

[c7]   7. A method as set forth in claim 5, wherein the act of acquiring data from a first diagnostic test is performed by a biochemical testing module.

[c8]   8. A method as set forth in claim 5, wherein the act of acquiring data from a first diagnostic test is performed by a history acquisition module.

[c9]   9. A method as set forth in claim 5, wherein the act of acquiring data from a first diagnostic test is performed by a nuclear imaging module.

[c10]   10. A method as set forth in claim 5, wherein the act of acquiring data from a first diagnostic test is performed by an ultrasonic imaging module.

[c11]   11. A method as set forth in claim 5, wherein the act of acquiring data from a second diagnostic test includes acquiring diagnostic data of a second type that differs from the diagnostic data acquired by the first diagnostic test.

[c12]   12. A method as set forth in claim 11, wherein the act of acquiring data from a second diagnostic test includes acquiring data from an ECG acquisition module.

[c13]   13. A method as set forth in claim 11, wherein the act of acquiring data from a second diagnostic test includes acquiring data from a biochemical testing module.

[c14]   14. A method as set forth in claim 11, wherein the act of acquiring data from a second diagnostic test includes acquiring data from a history acquisition module.

[c15]   15. A method as set forth in claim 11, wherein the act of acquiring data from a second diagnostic test includes acquiring data from a nuclear imaging module.

[c16]   16. A method as set forth in claim 11, wherein the act of acquiring data from a second diagnostic test includes acquiring data from an ultrasonic imaging module.

[c17]   17. A method as set forth in claim 1, wherein the method is for diagnosing acute cardiac syndromes.

[c18]   18. A cardiac syndrome diagnostic system comprising:
a first cardiac activity acquisition device operable to generate a first cardiac activity data;
a second cardiac activity acquisition device operable to generate a second cardiac activity data;
one or more processors to generate a first and second indicator based on the first and second cardiac activity data, respectively; and
a fusion engine operable to receive the first and second indicators, generate a first and second set of degrees of membership based on the first and second

indicators, and generate a risk of a cardiac syndrome based on a combination of the first and second sets of degrees of membership and a set of predetermined rules.

[c19]   19. A system as set forth in claim 18, wherein the fusion engine includes a fuzzifier.

[c20]   20. A system as set forth in claim 18, wherein the fusion engine includes an inference engine.

[c21]   21. A system as set forth in claim 18, wherein the fusion engine includes a defuzzifier.

[c22]   22. A system as set forth in claim 18, wherein the system diagnoses acute cardiac syndromes.

[c23]   23. A diagnostic system comprising:
a first physiological activity acquisition module;
a second physiological activity acquisition module; and
a fusion engine operable to receive data from the first and second modules and to generate a risk of ACS based on a combination of the data received from the first and second modules.

[c24]   24. A system as set forth in claim 23, wherein the combination of the data received from the first and second modules is based on fuzzy logic algorithms.

[c25]   25. A system as set forth in claim 23, wherein the first physiological activity acquisition module performs a first physiological test on physiological data of a first type.

[c26]   26. A system as set forth in claim 25, wherein the first physiological activity acquisition module is an ECG acquisition module.

[c27]   27. A system as set forth in claim 25, wherein the first physiological activity acquisition module is a biochemical testing module.

[c28]   28. A system as set forth in claim 25, wherein the first physiological activity acquisition module is a history acquisition module.

[c29]   29.A system as set forth in claim 25, wherein the first physiological activity acquisition module is a nuclear imaging module.

[c30]   30.A system as set forth in claim 25, wherein the first physiological activity acquisition module is an ultrasonic imaging module.

[c31]   31.A system as set forth in claim 25, wherein the second physiological activity acquisition module performs a second physiological test on physiological data of a second type that is different than the first type of physiological data.

[c32]   32. A system as set forth in claim 31, wherein the second physiological activity acquisition module is an ECG acquisition module.

[c33]   33.A system as set forth in claim 31, wherein the second physiological activity acquisition module is a biochemical testing module.

[c34]   34.A system as set forth in claim 31, wherein the second physiological activity acquisition module is a history acquisition module.

[c35]   35.A system as set forth in claim 31, wherein the second physiological activity acquisition module is a nuclear imaging module.

[c36]   36.A system as set forth in claim 31, wherein the second physiological activity acquisition module is an ultrasonic imaging module.

[c37]   37.A method for diagnosing acute cardiac syndromes (ACS), the method comprising the acts of:
acquiring ECG data;
processing the ECG data to produce an ECG indicator;
acquiring biomarker data;
processing the biomarker data to produce a biomarker indicator;
combining the indicators; and
calculating a risk of ACS using fuzzy logic rules.

[c38]   38.A method of diagnosing cardiac syndromes, the method comprising the acts of:
acquiring data from a plurality of diagnostic tests;

processing the data from the plurality of diagnostic tests to produce a plurality of indicators;

combining the plurality of indicators; and

calculating a risk of a cardiac syndrome based on the combination of the plurality of indicators.

[c39]   39.A method as set forth in claim 38, wherein the cardiac syndrome is an acute cardiac syndrome.